10/709,455

Refine Search

Search Results -

Term	Documents
MAGNETIC	1510837
MAGNETICS	13264
RESONANCE	300938
RESONANCES	17605
MRI	28186
MRIS	397
NMR	148804
NMRS	256
(13 AND (MRI OR (MAGNETIC ADJ RESONANCE) OR NMR)).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	32
(L13 AND ((MAGNETIC ADJ RESONANCE) OR MRI OR NMR)).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	32

Database:
US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search: L15

Refine Search

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Search History

DATE: Tuesday, June 14, 2005 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ			
L15	L13 and ((magnetic adj resonance) or MRI or NMR)	32	L15
L14	L13 and (anti-noise or (reduce adj perception))	0	L14
L13	L1 and (system adj noise)	522	L13

L12	(inaudiable)	3	L12
L11	L1 and (inaudiable)	1	L11
L10	L9 and (inaudiable)	0	L10
L9	L1 and (anti-noise or (reduce adj perception))	61	L9
L8	L2 and (anti-noise or (reduce adj perception))	3	L8
L7	L4 and (anti-noise or (reduce adj perception))	3	L7
L6	L5 and (system adj noise)	29	L6
L5	L4 and (ultrasonic)	1206	L5
L4	L3 and (noise or anti-noise or (reduce adj perception))	1542	L4
L3	L2 and signal	5415	L3
L2	L1 and ((magnetic adj resonance) or MRI or NMR)	9987	L2
L1	(ultrasonic or hypersonic or parametric)	291647	L1

END OF SEARCH HISTORY

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SYSTEM:OS  - DIALOG OneSearch
  File 155:MEDLINE(R) 1951-2005/May W4
         (c) format only 2005 The Dialog Corp.
  File   2:INSPEC 1969-2005/May W3
         (c) 2005 Institution of Electrical Engineers
  File   5:Biosis Previews(R) 1969-2005/May W4
         (c) 2005 BIOSIS
  File   6:NTIS 1964-2005/May W3
         (c) 2005 NTIS, Intl Cpyrght All Rights Res
  File   8:Ei Compendex(R) 1970-2005/May W3
         (c) 2005 Elsevier Eng.  Info. Inc.
  File  73:EMBASE 1974-2005/May W4
         (c) 2005 Elsevier Science B.V.
  File 987:TULSA (Petroleum Abs) 1965-2005/May W4
         (c)2005 The University of Tulsa
  File  94:JICST-EPlus 1985-2005/Apr W1
         (c)2005 Japan Science and Tech Corp(JST)
  File  35:Dissertation Abs Online 1861-2005/May
         (c) 2005 ProQuest Info&Learning
  File 144:Pascal 1973-2005/May W3
         (c) 2005 INIST/CNRS
  File 105:AESIS 1851-2001/Jul
         (c) 2001 Australian Mineral Foundation Inc
*File 105: This file is closed (no updates)
  File  99:Wilson Appl. Sci & Tech Abs 1983-2005/Apr
         (c) 2005 The HW Wilson Co.
  File  58:GeoArchive 1974-2005/Mar
         (c) 2005 Geosystems
  File  34:SciSearch(R) Cited Ref Sci 1990-2005/May W4
         (c) 2005 Inst for Sci Info
  File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
  File 292:GEOBASE(TM) 1980-2005/Apr B1
         (c) 2005 Elsevier Science Ltd.
  File  89:GeoRef 1785-2005/May B1
         (c) 2005 American Geological Institute
*File  89: Please see HELP ALERTALL for new Alert frequency and
price. Please see HELP RATES 89 for new Academic Subscriber rates.
  File  65:Inside Conferences 1993-2005/May W4
         (c) 2005 BLDSC all rts. reserv.
  File 350:Derwent WPIX 1963-2005/UD,UM &UP=200533
         (c) 2005  Thomson Derwent
*File 350: For more current information, include File 331 in your search.
Enter HELP NEWS 331 for details.
  File 347:JAPIO Nov 1976-2005/Jan(Updated 050506)
         (c) 2005 JPO & JAPIO
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Set	Items	Description
S1	511	AU=(SELLERS, M? OR SELLERS M?)
S2	15	S1 AND ((MRI OR MAGNETIC(1W)(IMAG? OR IMAGING) OR MAGNETIC-(W)RESONAN? OR NMR OR NUCLEAR()MAGNETIC()RESONANCE OR FTNMR -OR FTMRI OR MAGNETORESONANCE OR PMR OR PROTON(W)MAGNETIC(W)RE-SONAN? OR MR()(IMAGE? OR IMAGING)))
S3	15	RD (unique items)
S4	1	S3 AND MEDICAL?(2N)IMAG?
S5	14	S3 NOT S4
S6	2	S5 AND SCAN?
S7	12	S5 NOT S6
S8	0	S7 AND IMAG?(2N)(AREA OR SUBJECT? ?)
S9	12	S7
S10	1841138	MRI OR MAGNETIC(1W)(IMAG? OR IMAGING) OR MAGNETIC(W)RESONA-N? OR NMR OR NUCLEAR()MAGNETIC()RESONANCE OR FTNMR OR FTMRI -OR MAGNETORESONANCE OR PMR OR PROTON(W)MAGNETIC(W)RESONAN? OR MR()(IMAGE? OR IMAGING)
S11	43905	MC=(S01-E02A2 OR S03-E07A OR S01-E02A8A OR S01-E02A1 OR S0-3-E07C OR S05-D02B1 OR S03-C02F1) OR IC=(G01R-003 OR G01N-024-/08 OR G01V-003/A75) OR CC=(A0758 OR A8760I OR B7510N)
S12	1855580	S10:S11
S13	196598	MEDICAL?(2N)IMAG?
S14	2193337	SCAN?
S15	59842	IMAG?(2N)(AREA OR SUBJECT? ?)
S16	42620	SYSTEM(2N)(NOISE? ? OR DISTURB?)
S17	3238	NOISE? ?(2N)PERCEPTION
S18	45813	S16:S17
S19	1042936	EMITTER?(2N)SYSTEM? OR EMIT?
S20	137	INAUDIBL?(2N)(SIGNAL? OR IMPULS? OR PULS?)
S21	2883	(REDUC? OR MINIM? OR LOWER?)(2N)PERCEPTION
S22	58064	S12 AND S13
S23	7999	S22 AND S14
S24	136	S23 AND S15
S25	0	S24 AND S16
S26	0	S24 AND S18
S27	0	S24 AND S19
S28	0	S24 AND S20
S29	0	S24 AND S21
S30	4908	S12 AND S19
S31	3	S30 AND S18
S32	3	RD (unique items)
S33	4905	S30 NOT S31
S34	28	S33 AND S15
S35	3	S34 AND S13
S36	3	RD (unique items)
S37	25	S34 NOT S35
S38	22	RD (unique items)
S39	0	S21 AND S20
S40	11	S18 AND INAUDIBL?
S41	10	RD (unique items)
S42	0	S41 AND S12
S43	0	S41 AND IMAG?

Hit List

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Search Results - Record(s) 1 through 5 of 5 returned.

☐ 1. Document ID: US 5552708 A Relevance Rank: 99

L3: Entry 1 of 5 File: USPT Sep 3, 1996

US-PAT-NO: 5552708
DOCUMENT-IDENTIFIER: US 5552708 A

TITLE: Magnetic resonance imaging apparatus comprising a communication system

DATE-ISSUED: September 3, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ham; Cornelis L. G.	Eindhoven			NL

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
U.S. Philips Corporation	New York	NY			02

APPL-NO: 08/ 347012 [PALM]
DATE FILED: November 30, 1994

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
BE	09301319	November 30, 1993

INT-CL: [06] G01 R 33/28

US-CL-ISSUED: 324/318; 128/653.5
US-CL-CURRENT: 324/318; 600/418

FIELD-OF-SEARCH: 324/318, 324/324, 324/300, 128/653.2, 128/653.5, 381/74, 381/94

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
4689565	August 1987	Kemner	324/309
4696030	September 1987	Egozi	381/94
4723294	February 1988	Taguchi	381/94

5033082	July 1991	Eriksson et al.	379/410
5277184	January 1994	Messana	324/318
5293578	March 1994	Nagami et al.	381/71
5377275	December 1994	Suzuki	381/71
5384537	January 1995	Ito et al.	324/318
5398286	March 1995	Balestri et al.	381/94
5427102	June 1995	Shimode et al.	324/318
5436564	July 1995	Kreger et al.	324/322

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
60-58734	April 1985	JP	
1145051	June 1989	JP	
2265790	October 1993	GB	
9002513	March 1990	WO	

ART-UNIT: 225

PRIMARY-EXAMINER: O'Shea; Sandra L.

ASSISTANT-EXAMINER: Mah; Raymond Y.

ATTY-AGENT-FIRM: Slobod; Jack D.

ABSTRACT:

Magnetic resonance imaging includes a system of gradient coils (3) for generating gradient fields in a measuring space (35), a power supply source (7) for the gradient coils, and a communication system for transferring acoustic information from at least a first region (39) in which the level of gradient noise generated by the gradient coils (3) is comparatively high to at least a second region (41). The communication system includes a reference signal generating device for generating a reference signal which is dependent on the gradient noise, a microphone (43) which is arranged in the first region (39) so as to pick up a mixture of sound information and gradient noise, and a sound reproduction device (65, 67), at least a part of which is situated in the second region (41). The communication system also includes a noise suppression device, formed by a filter device (61) for converting the reference signal into a signal which corresponds substantially to the gradient noise at the area of the microphone (43), and a summing device (63) for adding the output signal of the filter device to the output signal of the microphone in phase opposition, the output of the summing device being connected to the sound reproduction device. Between the microphone (43) and the summing device (63) a signal delay device (53) is inserted which delays the microphone signal for a predetermined period of time. The sound reproduction device (65, 67) is provided with a device (69) for attenuating sound which does not originate from the sound reproduction device.

10 Claims, 2 Drawing figures

☐ 2. Document ID: US 5427102 A Relevance Rank: 44

L3: Entry 2 of 5 File: USPT Jun 27, 1995

US-PAT-NO: 5427102
DOCUMENT-IDENTIFIER: US 5427102 A

TITLE: Active noise cancellation apparatus in MRI apparatus

DATE-ISSUED: June 27, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shimode; Shin'ichi	Ibaraki			JP
Inouye; Hiroshi	Ibaraki			JP
Saho; Norihide	Tsuchiura			JP
Okabe; Shinya	Shimizu			JP
Otsuka; Masayuki	Katsuta			JP
Iwase; Yukiji	Ushiku			JP
Yamamoto; Etsuji	Akishima			JP
Shiono; Hidemi	Akigawa			JP
Takiguchi; Kenji	Kodaira			JP

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Hitachi, Ltd.	Tokyo			JP	03

APPL-NO: 08/ 331156 [PALM]
DATE FILED: October 28, 1994

PARENT-CASE:
This application is a continuation application of Ser. No. 07/901,219, filed Jun. 19, 1992, now abandoned.

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
JP	3-150477	June 21, 1991

INT-CL: [06] A61 B 5/055, H04 B 15/00

US-CL-ISSUED: 128/653.2; 128/653.5, 381/71, 381/94, 324/318
US-CL-CURRENT: 600/410; 128/925, 324/318, 381/71.9

FIELD-OF-SEARCH: 128/653.2, 128/653.5, 324/300, 324/309, 324/318, 324/322, 381/71, 381/94

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
4654871	March 1987	Chaplin et al.	381/94
4696030	September 1987	Egozi	381/94
4701952	October 1987	Taylor	381/67
4878499	November 1989	Suzuki et al.	128/653.2
4903703	February 1990	Igarashi et al.	128/653.2
4981137	January 1991	Kondo et al.	128/653.2
5033082	July 1991	Eriksson et al.	381/94
5076275	December 1991	Bechor et al.	128/653.2
5084676	January 1992	Saho et al.	324/322
5133017	July 1992	Shimode et al.	381/71

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
270195	March 1990	JP	
8802912	April 1988	WO	
9002513	March 1990	WO	

ART-UNIT: 335

PRIMARY-EXAMINER: Pfaffle; Krista M.

ATTY-AGENT-FIRM: Antonelli, Terry, Stout & Kraus

ABSTRACT:

An active noise cancellation apparatus of an MRI apparatus, including a detector for detecting vibration of a bobbin or a driving signal of a magnetism generator as a noise source signal, error signal detectors for detecting actual noise near the ears of a patient, a circuit for generating a noise cancellation signal having an opposite phase to a phase of a noise signal generated by an MRI apparatus and having an amplitude proportional to the output of the error signal detectors, from the detected noise source signal and the output of the error signal detectors, and a sound generator for generating a sound wave by the noise cancellation signal.

25 Claims, 19 Drawing figures

☐ 3. Document ID: US 5313945 A Relevance Rank: 41

L3: Entry 3 of 5 File: USPT May 24, 1994

US-PAT-NO: 5313945
DOCUMENT-IDENTIFIER: US 5313945 A

TITLE: Active attenuation system for medical patients

DATE-ISSUED: May 24, 1994

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Friedlander; Paul	Randallstown	MD		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Noise Cancellation Technologies, Inc.	Linthicum	MD			02

APPL-NO: 07/ 543854 [PALM]
DATE FILED: June 11, 1990

PCT-DATA:

APPL-NO	DATE-FILED	PUB-NO	PUB-DATE	371-DATE	102(E)-DATE
PCT/US89/04004	September 18, 1989			Jun 11, 1990	Jun 11, 1990

INT-CL: [05] A61B 5/055

US-CL-ISSUED: 128/653.2; 381/71, 381/94, 324/318
US-CL-CURRENT: 600/410; 324/318, 381/71.9

FIELD-OF-SEARCH: 128/653A, 128/653C, 128/653A, 128/653.2, 324/300, 324/318, 331/71, 331/94

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
4585995	April 1986	Flyan	324/318
4654871	March 1987	Chaplin et al.	381/72
4682108	July 1987	Stetler et al.	128/653A
4696030	September 1987	Egozi	381/94
4698591	October 1987	Glover et al.	324/318
4701952	October 1987	Taylor	381/67
4703275	October 1987	Holland	324/322
4737716	April 1988	Roener et al.	324/319
4903703	February 1990	Igarashi et al.	128/653.2
4981137	January 1991	Kondo et al.	381/94
5022082	June 1991	Eriksson et al.	381/71
5033082	July 1991	Eriksson et al.	381/94
5076275	December 1991	Bechor et al.	128/653.2
5133017	July 1992	Cain et al.	381/71

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
0212840	March 1987	EP	381/71

3627002 February 1988 DE 381/71

OTHER PUBLICATIONS

Free, John "Noise Zapper", Popular Science, Jan. 1987.

ART-UNIT: 335

PRIMARY-EXAMINER: Cohen; Lee S.

ASSISTANT-EXAMINER: Pfaffle; Krista M.

ATTY-AGENT-FIRM: Hiney; James W.

ABSTRACT:

An apparatus and method of actively cancelling undesirable acoustic noise generated by a patient diagnosing apparatus during a diagnosis operation which includes a remotely located active noise cancellation unit. The undesirable acoustic noise is transferred via hollow tubes from the patient diagnosing apparatus to the remote location to be detected thereat. A control unit thereafter generates cancellation waves based upon the detected undesirable acoustic noise. The cancellation waves are transferred to the patient area via additional hollow tubes to cancel the undesirable acoustic noise. The use of hollow tubes of non-magnetic, non-metallic material ensures that the undesirable acoustic noise and the cancellation waves do not interfere with the diagnosis of operation.

24 Claims, 5 Drawing figures

☐ 4. Document ID: EP 411801 A, ES 2123496 T3, AU 9059986 A, CA 2021676 A, JP 03070397 A, US 5033082 A, AU 634798 B, EP 392876 B1, CA 2021676 C, EP 411801 B1, DE 69032637 E Relevance Rank: 40

L3: Entry 5 of 5 File: DWPI Feb 6, 1991

DERWENT-ACC-NO: 1991-038691
DERWENT-WEEK: 199909

TITLE: Active noise cancellation system for communication area - uses microphones to generate noise and error signals and speaker to produce cancellation noise from adaptive filter

INVENTOR: ALLIE, M C; ERIKSSON, L J ; SCHWAB, G ; SZCZEPANSKI, N M

PATENT-ASSIGNEE: NELSON IND INC (NELSN), MEAD CORP (MEAC)

PRIORITY-DATA: 1990EP-0307990 (July 20, 1990), 1989US-0338014 (April 14, 1989), 1989US-0435319 (November 13, 1989)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 411801 A	February 6, 1991		012	
ES 2123496 T3	January 16, 1999		000	G10K011/16
AU 9059986 A	January 31, 1991		000	
CA 2021676 A	February 1, 1991		000	
JP 03070397 A	March 26, 1991		000	
US 5033082 A	July 16, 1991		011	
AU 634798 B	March 4, 1993		000	G10K011/16
EP 392876 B1	August 4, 1993	E	010	B01J013/16
CA 2021676 C	July 26, 1994		000	H04M009/00
EP 411801 B1	September 9, 1998	E	000	G10K011/16
DE 69032637 E	October 15, 1998		000	G10K011/16

DESIGNATED-STATES: AT BE CH DE ES FR GB GR IT LI LU NL SE DE ES FR GB IT AT BE CH DE DK ES FR GB GR IT LI LU NL SE

CITED-DOCUMENTS:DE 2242910; DE 2251381 ; FR 2476100 ; 2.Jnl.Ref ; A3...199143 ; GB 1183625 ; JP 60058734 ; NoSR.Pub ; WO 9002513

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
EP 411801A	July 20, 1990	1990EP-0307990	
ES 2123496T3	July 20, 1990	1990EP-0307990	
ES 2123496T3		EP 411801	Based on
JP 03070397A	July 30, 1990	1990JP-0202359	
US 5033082A	July 31, 1989	1989US-0388014	
AU 634798B	July 30, 1990	1990AU-0059986	
AU 634798B		AU 9059986	Previous Publ.
EP 392876B1	April 17, 1990	1990EP-0304094	
CA 2021676C	July 20, 1990	1990CA-2021676	
EP 411801B1	July 20, 1990	1990EP-0307990	
DE 69032637E	July 20, 1990	1990DE-0632637	
DE 69032637E	July 20, 1990	1990EP-0307990	
DE 69032637E		EP 411801	Based on

INT-CL (IPC): B01J 13/16; B41M 5/165; G10K 11/16; H04M 9/00; H04M 9/08

ABSTRACTED-PUB-NO: EP 392876B
BASIC-ABSTRACT:

An active acoustic attenuation system for use in a zone subject to noise such as the interior of a motor vehicle. A microphone senses the noise the noise in the zone whilst at a location at which a person is speaking a speaker introduces noise, at which location there is also an error microphone.

An adaptive filter model has inputs from the noise and error microphones, and outputs a correction signal to the speaker to cancel the noise from the source of noise. Cancellation of the noise is achieved so that the error microphone carries the speech signal but no signal from the noise.

USE/ADVANTAGE - Magnetic resonance imaging system, motor vehicles. Cancels noise

and quietens environment allowing better communications and enjoyment of entertainment.

ABSTRACTED-PUB-NO: EP 411801A
EQUIVALENT-ABSTRACTS:

A process for preparing a suspension of microcapsules containing at least 40% and preferably at least 50% microcapsules, and containing at least 60% non-aqueous solids comprising the steps of dispersing an oily solution containing a first reactive wall-forming component into a continuous aqueous phase to form an oil-in-water emulsion, adding to said oil-in-water emulsion a solution of a second reactive wall-forming component in which said solution and/or said continuous phase there is contained a non-aqueous, water miscible solvent, preferably a polyhydric alcohol, the total amount of said non-aqueous water miscible solvent in the continuous phase after addition of said solution being 10-45%; and reacting said first reactive wall-forming component with said second reactive wall-forming component to form a polymer wall around the oil droplets in said oil-in-water emulsion; the amount of oil dispersed in said oil-in-water emulsion being at least 45% and preferably 55-60% based on the total amount of oil, water and water miscible solvent.

EP 411801B

An active acoustic attenuation system for use in a zone subject to noise such as the interior of a motor vehicle. A microphone senses the noise the noise in the zone whilst at a location at which a person is speaking a speaker introduces noise, at which location there is also an error microphone.

An adaptive filter model has inputs from the noise and error microphones, and outputs a correction signal to the speaker to cancel the noise from the source of noise. Cancellation of the noise is achieved so that the error microphone carries the speech signal but no signal from the noise.

USE/ADVANTAGE - Magnetic resonance imaging system, motor vehicles. Cancels noise and quietens environment allowing better communications and enjoyment of entertainment.

US 5033082A

The active acoustic attenuation system (10) is provided with various adaptive filter models (40,48,56,70,84,100) enabling communication between persons (26,30) in spaced zones (12,16) by selectively cancelling undesired noise and speech.

The active acoustic attenuation system comprises a first zone (12) subject ot noise from a noise source (14) and a second zone (16) spaced from zone (12) and subject to noise from a noise source (18). Microphone (20) senses noise from noise source (14). Microphone (22) senses noise from noise source (18). Zone (12) includes a speaking location (24) such that a person (26) at location (24) in subject to noise from noise source (14). Zone (16) includes a speaking location (28) such that a person (30) at location (28) is subject to noise from noise source (18). Speaker (32) introduces sound into zone (12) at location (24). Speaker (34) introduces sound into zone (16) at location (28). An error microphone (36) senses noise and speech at location (24). Error microphone (38) senses noise and speeck at location (28). An adaptive filter model (40) adaptively models the acoustic path from noise microphone (20) to speaking location (24).

ADVANTAGE - Effectively cancels undesired noise and speech on an on-line basis

without dedicated off-line protraining, for both broadband and narrow band noise. @ (11pp)@

CHOSEN-DRAWING: Dwg.0/0 Dwg.0/1

DERWENT-CLASS: A25 A84 A97 E16 E33 G05 P75 P86 S05 W04 X22
EPI-CODES: S05-D02X; S05-G; W04-V; X22-X;

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw D

☐ 5. Document ID: US 5033082 A Relevance Rank: 40

L3: Entry 4 of 5 File: USPT Jul 16, 1991

US-PAT-NO: 5033082
DOCUMENT-IDENTIFIER: US 5033082 A

TITLE: Communication system with active noise cancellation

DATE-ISSUED: July 16, 1991

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Eriksson; Larry J.	Madison	WI		
Allie; Mark C.	Oregon	WI		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Nelson Industries, Inc.	Stoughton	WI			02

APPL-NO: 07/ 388014 [PALM]
DATE FILED: July 31, 1989

INT-CL: [05] H04B 3/23, H04B 15/00

US-CL-ISSUED: 379/410; 379/388, 379/392, 381/71, 381/94
US-CL-CURRENT: 379/406.08; 379/392, 381/71.11, 381/94.7

FIELD-OF-SEARCH: 381/71, 381/94, 379/388, 379/392, 379/410, 379/411

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
4153815	May 1979	Chaplin et al.	381/71
4417098	November 1983	Chaplin et al.	381/71 X
4473906	September 1984	Warnaka et al.	381/71
4566118	January 1986	Chaplin et al.	381/71

4589137	May 1986	Miller	381/71 X
4625083	November 1986	Poikela	381/71 X
4636586	January 1987	Schiff	381/71 X
4649505	March 1987	Zinser, Jr. et al.	381/71 X
4654871	March 1987	Chaplin et al.	381/94 X
4665549	May 1987	Eriksson et al.	381/71
4672674	June 1987	Clough et al.	381/71
4677676	June 1987	Ericksson	381/71
4677677	June 1987	Eriksson	381/71
4696030	September 1987	Egobi	381/94 X
4736431	April 1988	Allie et al.	381/71
4757527	July 1988	Benistor et al.	379/410
4769847	September 1988	Taguchi	381/94
4815139	March 1989	Eriksson et al.	381/71
4837834	June 1989	Allie	381/71
4876722	October 1989	Dekker et al.	381/71
4912758	March 1990	Arbel	379/388
4932063	June 1990	Nakamura	381/94
4935919	June 1990	Hiraguchi	379/410 X

OTHER PUBLICATIONS

"Adaptive Noise Cancelling: Principles and Applications", Widrow et al, Dec. 1975, IEEE.

ART-UNIT: 261

PRIMARY-EXAMINER: Dwyer; James L.

ASSISTANT-EXAMINER: Shehata; M.

ATTY-AGENT-FIRM: Andrus, Sceales, Starke & Sawall

ABSTRACT:

An active acoustic attenuation system (10) is provided with various adaptive filter models (40, 48, 56, 70, 84, 100) enabling communication between persons (26, 30) in spaced zones (12, 16) by selectively cancelling undesired noise and undesired speech, all on an on-line basis without dedicated off-line pretraining and also for both broadband and narrowband noise.

39 Claims, 1 Drawing figures

MAGNETICS	13264
RESONANCE	300938
RESONANCES	17605
(2 AND (MAGNETIC ADJ RESONANCE)).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	5
(L2 AND (MAGNETIC ADJ RESONANCE)).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	5

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Previous Page Next Page Go to Doc#